ABSTRACT OF THE DISCLOSURE

An electrode-membrane assembly comprising a pair of electrodes at least one of which is porous, and a thermoplastic resin membrane having a functional group capable of being modified to a free ion exchange group upon hydrolysis, which is interposed between the two electrodes and partly penetrates into the pores of the electrode. In this arrangement, the ion exchange membrane can be mechanically integrated to the anode and cathode to compensate for the insufficiency of mechanical exchange membrane. Thus, strength of the ion electrode-membrane assembly which can be used in an industrial electrolytic cell or fuel cell is provided.